

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

113. (Currently Amended) A method for eliciting or enhancing an immune response to HER-2/neu protein, the method comprising the step of administering to a warm-blooded animal a composition comprising an isolated protein comprising a ~~Her2/Neu~~ HER-2/neu ECD-PD fusion protein in an amount effective to elicit or enhance the immune response, the ~~Her-2/neu~~ HER-2/neu ECD-PD fusion protein ~~comprising~~ consisting of a ~~Her-2/neu~~ HER-2/neu extracellular domain fused to a ~~Her-2/neu~~ HER-2/neu phosphorylation domain, wherein the HER-2/neu fusion protein comprises at least 90% identity to SEQ ID NO:6 ~~is encoded by a nucleic acid that hybridizes under stringent conditions to the complement of a nucleic acid sequence encoding an amino acid sequence of SEQ ID NO:6, wherein the hybridization reaction is incubated in a solution comprising 5x SSC at a temperature of 50-65°C and washed in a solution comprising 0.2x SSC and 0.1% SDS at a temperature of 65°C, and wherein the~~ HER-2/neu fusion protein is capable of producing an immune response in a warm-blooded animal.

114. (Previously Presented) The method of claim 113, wherein the composition is administered in the form of a vaccine.

115. (Previously Presented) The method of claim 113, wherein the fusion protein comprises an amino acid sequence of SEQ ID NO:6.

116. (Previously Presented) The method of claim 113, wherein the fusion protein comprises an amino acid sequence of SEQ ID NO:7.

117. (Previously Presented) The method of claim 113, wherein the fusion protein is lipidated.

118. (Previously Presented) The method of claim 113, wherein the composition comprises a physiologically acceptable carrier or diluent.

119. (Previously Presented) The method of claim 118, wherein the composition comprises an oil-in-water emulsion.

120. (Previously Presented) The method of claim 119, wherein the composition comprises tocopherol.

121. (Previously Presented) The method of claim 113, wherein the composition comprises an immunostimulatory substance.

122. (Previously Presented) The method of claim 121, wherein the composition comprises an immunostimulatory substance comprising 3D-MPL, QS21, or a combination of 3D-MPL and QS21.

123. (Currently Amended) The method of claim 121, wherein the composition comprises an immunostimulatory substance comprising ~~3dMPL~~ 3D-MPL and QS21 in an oil-in-water emulsion.

124. (Previously Presented) The method of claim 123, wherein the composition comprises tocopherol.

125. (Previously Presented) The method of claim 113, wherein the composition comprises a CpG-containing oligonucleotide.

126. (Previously Presented) The method of claim 113, wherein the step of administering comprises transfecting cells of the warm-blooded animal ex vivo with the

composition comprising the fusion protein and subsequently delivering the transfected cells to the warm-blooded animal.

127. (Currently Amended) A method for eliciting or enhancing an immune response to HER-2/neu protein, the method comprising the step of administering to a warm-blooded animal a composition comprising a nucleic acid molecule encoding a polypeptide comprising a HER-2/neu fusion protein in an amount effective to elicit or enhance the immune response, the HER-2/neu fusion protein ~~comprising~~ consisting of a HER-2/neu extracellular domain ~~fused~~ linked to a HER-2/neu phosphorylation domain, wherein the ~~nucleic acid hybridizes under stringent conditions to the complement of a nucleic acid sequence encoding the amino acid sequence of SEQ ID NO:6, wherein the hybridization reaction is incubated in a solution comprising 5x SSC at a temperature of 50-65°C and washed in a solution comprising 0.2x SSC and 0.1% SDS at a temperature of 65°C~~ HER-2/neu fusion protein comprises at least 90% identity to SEQ ID NO:6, and wherein the HER-2/neu fusion protein is capable of producing an immune response in a warm-blooded animal.

128. (Previously Presented) The method of claim 127, wherein the nucleic acid molecule is in the form of a vaccine.

129. (Previously Presented) The method of claim 127, wherein the step of administering comprises transfecting cells of the warm-blooded animal *ex vivo* with the composition comprising the nucleic acid molecule and subsequently delivering the transfected cells to the warm-blooded animal.

130. (Previously Presented) The method of claim 127, wherein the composition comprises a lipid.

131. (Previously Presented) The method of claim 127, wherein the composition comprises a physiologically acceptable carrier or diluent.

132. (Previously Presented) The method of claim 127, wherein the nucleic acid molecule is a viral vector encoding a HER-2/neu fusion protein.

133. (Previously Presented) The method of claim 127, wherein the viral vector is an adenoviral vector.

134. (Previously Presented) The method of claim 129, wherein the nucleic acid molecule is a viral vector encoding a HER-2/neu fusion protein.

135. (Previously Presented) The method of claim 134, wherein the viral vector is an adenoviral vector.

136. (Previously Presented) The method of claim 127, wherein the nucleic acid molecule encodes a protein comprising an amino acid sequence of SEQ ID NO:6.

137. (Previously Presented) The method of claim 127, wherein the nucleic acid molecule encodes a protein comprising an amino acid sequence of SEQ ID NO:7.

138. (Currently Amended) A method for eliciting or enhancing an immune response to HER-2/neu protein, the method comprising the step of administering to a warm-blooded animal a composition comprising a viral vector comprising a nucleic acid molecule encoding a HER-2/neu fusion protein in an amount effective to elicit or enhance the immune response, the HER-2/neu fusion protein ~~comprising~~ consisting of a HER-2/neu extracellular domain fused to a HER-2/neu phosphorylation domain, wherein the ~~nucleic acid hybridizes under stringent conditions to the complement of a nucleic acid sequence encoding the amino acid sequence of SEQ ID NO:6, wherein the hybridization reaction is incubated in a solution comprising 5x SSC at a temperature of 50-65°C and washed in a solution comprising 0.2x SSC and 0.1% SDS at a temperature of 65°C~~ HER-2/neu fusion protein comprises at least 90%

identity to SEQ ID NO:6, and wherein the HER-2/neu fusion protein is capable of producing an immune response in a warm-blooded animal.

139. (Previously Presented) The method of claim 138, wherein the step of administering comprises infecting cells of the warm-blooded animal ex vivo with the viral vector and subsequently delivering the infected cells to the warm-blooded animal.

140. (Previously Presented) The method of claim 138, wherein the composition comprises a lipid.

141. (Previously Presented) The method of claim 138, wherein the composition comprises a physiologically acceptable carrier or diluent.

142. (Previously Presented) The method of claim 138, wherein the viral vector is an adenoviral vector.

143. (Previously Presented) The method of claim 138, wherein the nucleic acid molecule encodes a protein comprising an amino acid sequence of SEQ ID NO:6.

144. (Previously Presented) The method of claim 138, wherein the nucleic acid molecule encodes a protein comprising an amino acid sequence of SEQ ID NO:7.